

Clinical Laboratory Medicine	East Lancashire Hospitals 
Document name: Sample transportation	NHS Trust
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1 Purpose

This procedure is designed to ensure that samples are correctly packaged and transported to the laboratory within the required time frame, at the correct temperature and with the correct preservatives to ensure the integrity of the samples.

It also ensures the safety of staff, carriers and the General Public by compliance with Health & Safety and other legislation and guidance.

2 Scope

This policy sets out the safe working practices for all staff engaged in the transport of clinical samples. It is to be regarded as a reference guide to good practice.

The safe transport of clinical samples while still retaining patient confidentiality and sample integrity is of paramount importance.

The movement of samples will be categorised with both general and specific guidance available for use by the Trust staff and private contractors.

Responsibility for the safe collection and packaging of clinical samples shall rest entirely upon the sender, it is therefore imperative that all areas where clinical materials are generated remain conversant with current rules, regulations and up to date safety codes of practice.

Scheduled transport runs will operate according to a strict agreed timetable and be subject to periodical audit.

The Department of Clinical Laboratory Medicine shall provide such information and training (as appropriate) to both employees of the Trust and contracted staff in the safe practices to be used.

3 Statement of intent

The intention of this procedure is to formulate rules and methods of working which will safeguard, so far as is reasonably practicable, the sample integrity and the health, safety and welfare of all persons who have need to transport Pathological samples for ELHT or may be affected by such work activity.

The promotion of a high level of safety and confidentiality awareness amongst all grades of staff is of great importance throughout the directorate.

The development of a *Safety culture* through training, updates and audit of operating procedures will be encouraged.

Where possible, systems which allow tracking of samples shall be developed and implemented.

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4 Duty of care

Each employee is required to take reasonable care for the health and safety of themselves and all other persons who may be affected by their acts or omissions at work.

Attention is drawn to reference list of regulations which appears at the end of this policy.

5 Key contacts:

Pathology Directorate Manager 01254 734162

Pathology Specimen reception 01254 734144

6 Incident Reporting

Users of the service shall be encouraged to report any incidents during transportation that may affect the quality of the specimen or the safety of personnel. These should be reported to the first line of contact – Specimen Reception, who will report to their line manager for further action or fill in a Datix Incident Report (IR1) on OLI.

7 Transport of samples - General information

It is important that care is taken when collecting and handling clinical samples to ensure that the risk of infection to staff is kept to an absolute minimum. These rules must be observed at all times and never allowed to lapse at busy periods or because of a failure to maintain adequate supplies of bags or containers. Members of staff employed within the Trust must not be put at risk because of ignorance, negligence or bad technique.

- a) Specimen pots containing formalin must be transported sealed to prevent leakage. Formalin pots must be sealed, bagged and placed in to transport boxes.
- b) For transport to the laboratory, samples must be placed inside a plastic sample bag and sealed. The request form is attached to the bag via a sticky strip (ICE request form) or can be placed in the second pocket of the bag (written request forms) The form should not be placed in with the samples as leakage will ruin the form.
- c) For transport within the laboratory, samples must be supported upright in a purpose made rack or tray to prevent accidental contamination of staff, request forms and other samples.
- d) Urgent samples outside of normal laboratory hours will be transported in sealed opaque plastic bags.
- e) Boxes, racks and trays will be of such a design to allow for decontamination and sterilization at specified intervals.
- f) Samples must never be carried unprotected in the open hand or given to other members of staff in this way.

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- g) Patient confidentiality must be observed where “sensitive” information is displayed on the request form by the use of envelopes or opaque plastic bags.
- h) The use of an air tube delivery system poses additional risks; details for use of the system are given in section 15.
- i) Never leave samples unattended in a public area.
- j) Any delay in sample delivery, or untoward incident, must be notified to laboratory reception staff and transport managers.

8 Transport of samples between hospitals

It is important that care is taken when collecting and handling clinical samples to ensure that the risk of infection to staff is kept to an absolute minimum. These rules must be observed at all times and never allowed to lapse at busy periods or because of a failure to maintain adequate supplies of bags or containers. Members of staff employed within the Trust must not be put at risk because of ignorance, negligence or bad technique.

- a) Specimen pots containing formalin must be transported sealed so as to prevent leakage. Formalin pots are sealed, bagged and placed in to transport boxes.
- b) Samples must always be carried in closed boxes, except for urgent one off samples, which must be contained in sealed opaque plastic bags as for taxi transport.
- c) Safe working practices (as described in *Model Rules for Transport Drivers*) shall be observed at all times.
- d) Urgent samples outside of normal laboratory hours will be transported in sealed opaque plastic bags.
- e) Samples must never be carried unprotected in the open hand or given to other members of staff in this way.
- f) Patient confidentiality must be observed where “sensitive” information is displayed on the request form by the use of envelopes or opaque plastic bags
- g) Samples must always be carried in closed red UN3373 compliant boxes which are clearly marked with a *BIOHAZARD* label. **Samples must never be thrown into a large plastic bag and transported in this manner.**
- h) The containment of samples within motor vehicles, used to transport samples, must be such as to restrain, retain and protect the contents in the event of an accident.
- i) Never leave samples unattended in a public area.
- j) Decontamination materials shall be available from the laboratories to enable small spillages to be contained. In the event of major contamination the Pathology Department must be contacted before any material is touched. Contact may be made via the hospital switchboard on 01254 263555 (Blackburn) or 01282 425071 (Burnley).

In the event of a vehicle accident or breakdown do not allow persons other than trust staff to handle specimens.

Non-lab staff must not attempt to remove or clear up damaged samples arising from any such accident. A senior member of the laboratory team will initially assess the problem and then instruct those on site how to proceed.

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- k) Protective garments (where supplied) must be worn and correctly fastened while handling samples. Any protective garments must be kept separate from personal outdoor clothing.
- l) Always wash hands thoroughly immediately after delivering samples.
- m) Any delay in sample delivery, or untoward incident, shall be notified to laboratory reception staff and transport managers.

9 Transport of samples by private taxi firms

It is important that care is taken when collecting and handling clinical samples to ensure that the risk of infection to staff is kept to an absolute minimum. These rules must be observed at all times and never allowed to lapse at busy periods or because of a failure to maintain adequate supplies of bags or containers. Members of staff employed within the Trust and private contractors must not be put at risk because of ignorance, negligence or bad technique.

- a) Samples must always be carried in closed sealed opaque plastic bags, or if too large, in suitable carrying trays or boxes.
- b) Safe working practices (as described in *Model Rules for Transport Drivers*) shall be observed at all times.
- c) Never carry clinical samples in your pocket, handbag or other personal item.
- d) Samples which are not sealed in a plastic bag are to be rejected until such time that the correct protocol is followed. (Ward or Department responsibility)
- e) Samples must never be carried unprotected in the open hand or given to other members of staff in this way.
- f) Decontamination materials are available from the laboratory to enable small spillages to be contained. In the event of any contamination the Laboratory must be contacted before any material is touched. Contact may be made via the hospital switchboard on 01254 263555.

In the event of a vehicle accident or breakdown do not allow persons other than taxi staff or Trust staff to handle specimens.

Non – lab staff must not attempt to remove or clear up damaged samples arising from any such accident. A senior member of the laboratory team will initially assess the problem and then instruct those on site how to proceed.

- g) Always wash hands thoroughly immediately after delivering samples.
- h) A written report of any such loss or breakage of sample must be made to the Laboratory H&S lead without delay and should be preceded by a verbal communication.
- j) Any delay in sample delivery, or untoward incident, shall be notified to laboratory reception staff and transport managers

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10 Transport of samples from GP surgeries using ELHT transport systems

It is important that care is taken when collecting and handling clinical samples to ensure that the risk of infection to staff is kept to an absolute minimum. These rules must be observed at all times and never allowed to lapse at busy periods or because of a failure to maintain adequate supplies of bags or containers. Members of staff employed within the Trust must not be put at risk because of ignorance, negligence or bad technique.

- a) Samples must be placed inside a plastic sample bag and sealed. The request form is attached to the bag via a sticky strip (ICE request form) or can be placed in the second pocket of the bag (written request forms). The form should not be placed in with the samples as leakage will ruin the form.
- b) Samples must always be carried in closed red UN3373 compliant boxes which are clearly marked with a *BIOHAZARD* label.
- c) Safe working practices (as described in *Model Rules for Transport Drivers*) shall be observed at all times.
- d) Should any urgent samples be sent outside of normal laboratory hours they will be transported in sealed opaque plastic bags.
- e) Samples must never be carried unprotected in the open hand or given to other members of staff in this way.
- f) Patient confidentiality must be preserved by the use of envelopes or opaque plastic bags
- g) The containment of samples within motor vehicles, used to transport samples, must be such as to restrain, retain and protect the contents in the event of an accident. Samples must be carried in the cargo section of the vehicle, and not in the drivers compartment.
- h) Decontamination materials are available from the laboratories at RBH and BGH to enable small spillages to be contained. In the event of major contamination the Laboratory must be contacted before any material is touched.

In the event of a vehicle accident or breakdown do not allow persons other than trained trust staff to handle specimens.

Non-lab staff must not attempt to remove or clear up damaged samples arising from any such accident. A senior member of the laboratory team will initially assess the problem and then instruct those on site how to proceed.

- i) Uniforms (where supplied) must be worn and correctly fastened while handling samples. Any protective garments must be kept separate from personal outdoor clothing.
- j) Always wash hands thoroughly immediately after delivering samples.
- k) Any delay in sample delivery, or untoward incident, shall be notified to laboratory reception staff and transport managers

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11 Spillage of clinical samples during transportation

- Any sample spillage must be reported immediately to a senior member of the Laboratory staff.
- The Hospital Transport department procedure for spillages is available to all drivers and is attached to this document for reference.
- If the spillage is reported to the Laboratory by any driver who is away from the laboratory then action must be taken without delay.
- The response by the laboratory staff (when involved) will depend upon the size and extent of the spillage and upon the level of contamination.
- All decontamination shall be in accordance with the current Clinical Laboratory Medicine Safety Manual procedures.
- ELHT Transport Spillage Policy (QMS Reference ED/2) is reproduced below and describes the process for transport staff.

TRANSPORT DEPARTMENT

SPILLAGE PROCEDURE

All drivers who have a spill must immediately follow this procedure:-

On Site/Clinic

- Seal the area off by whatever means there are to hand to contain the spillage and try to stop it spreading, if safe to do so place vehicle over the spillage, food/beverage spillage cordon off the area and get cleaning equipment
- Go to the nearest office IE: Transport/Logistics Office, Ward, Health Centre, Clinic or Lab Office to report the spillage and enable the area to be cleaned as soon as possible. If specimens report immediately to the Health Centre/Clinic to enable new specimens to be obtained
- Inform the Transport/Logistics Manager or Supervisor by telephone or radio, if away from the depot immediately of the spillage to enable them to contact the correct departments i.e. Path Lab, Domestics
- Complete an IR1 form on return to base
- Drivers must not place any yellow contaminated waste bags into their vehicle and transport them on the open roads they must be left at the clinic/Health Centre

On the Highway

- If the spill is out on the highways the driver must again seal off the area if possible by whatever means there are to hand, drivers must not try to deal with any spillage if it occurs whilst on a motorway, in the event of a Road Traffic Accident any spillage will be dealt with by the emergency services
- Radio or telephone control and ask them to report the spillage to the relevant departments and to arrange the appropriate spillage kit to be used
- If the vehicle is wooden lined and the spill is a blood products the wooden lining will be removed and burnt

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12 Transport of samples using the postal system

Samples for transport by this method may be classified as either: *-Diagnostic specimens or Infectious substances.*

Diagnostic specimens are any human or animal material, including, but not limited to excreta, secretions, blood and its components, tissue and tissue fluids being transported for diagnostic or investigative purposes – but excluding live infected animals.

Diagnostic samples shall be assigned UN 3373 unless the source patient or animal has or may have a serious human or animal disease which is readily transmitted from one individual to another, directly or indirectly, and for which treatment and preventative measures are not usually available, in which case they will be assigned UN 2814 or UN 2900.

UN 2814 or UN2900 shall be based on known medical history of the patient or animal, endemic local conditions, symptoms of the patient or animal or professional judgment concerning the individual circumstances of the patient or animal.

The decision as to whether a sample can travel to the laboratory as a diagnostic specimen instead of the more expensive option of an infectious substance lies with the health professional. *The Requesting Doctor must make a judgment.*

Diagnostic specimens (as defined for UN 3373) shall comply with packaging instructions which prevail at that time – currently P 650

P650 states that only the words “*Diagnostic Specimen*” need appear on the package in addition to any normal labeling requirements.

Information - a copy of this packaging instruction information shall be available to staff in relevant areas where samples are processed for onward transmission.

Training – the UN has a general training requirement. This requires all personnel involved in the transport of dangerous goods to be given relevant training. Health personnel will need some basic training based on the requirements for diagnostic specimens.

13 Transport of samples using DX tracked services.

DX health sector services provide tracked specimen delivery and collection services for Pathology. All samples sent via this route are packaged in accordance with their requirements.

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14 Transport of “High Risk” and “Danger of Infection” samples.

Clinical samples from the following categories must be classed as “Danger of Infection”.

- a) Material suspected to contain tubercle bacilli, typhoid or paratyphoid organisms, COVID-19.
- b) Blood samples from:-
 - 1) Patients suffering from brucellosis or typhoid.
 - 2) Patients known to be hepatitis B positive.
 - 3) Patients known to have HIV antibodies.
 - 4) Patients known to have had repeated blood transfusions.
 - 5) Patients known to have had repeated transfusions with blood products.
 - 6) Parenteral drug abusers.
 - 7) Patients known to be homosexual or bisexual.
 - 8) Patients who have resided in Central Africa.
 - 9) Intimate contacts of patients in groups (2) to (8).
 - 10) Patients in renal units.
 - 11) Patients known or suspected to be suffering from infective liver disease.
 - 12) Residents from prisons or institutions for the mentally handicapped.
 - 13) Patients from areas of the world where there is a high incidence of hepatitis B (e.g. Western Africa)
 - 14) Patients tattooed within the last year.
- c) Specimens from patients thought to be in the following categories must also be labelled “Danger of Infection”, but they must not be collected and sent to the laboratory before consultation with a microbiologist.
 - AIDS or HIV related disease.
 - Ebola fever, Marburg disease, Lassa fever or other viral haemorrhagic fevers.
 - Rabies, plague or anthrax.

Danger of Infection stickers must be applied to samples, plastic bags and request forms. All samples must be sealed in opaque plastic bags.

Danger of Infection samples must not be mixed in with routine samples – they should be clearly marked and segregated.

In the event of a breakage contact the Pathology laboratory for assistance.

15 Use of the hospital air tube system

See the ELHT Pneumatic Tube Policy PM/P02 for guidance on the use of the air tube transport system and the Pneumatic Tube System Procedure PM/M2 for comprehensive instructions on all aspects of the system’s correct and safe use.

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16 Model Rules for Hospital Staff delivering samples to the laboratory

Staff who deliver samples to the laboratory may have accidental contact with material that could be infectious. Consequently they must follow the general precautions outlined here:

- Wear your uniform properly fastened.
- Cover any cuts or grazes on your hands with a waterproof dressing.
- Carry all specimens in trays, bags or boxes provided not in your hands or pockets.
- Touch specimen containers as little as possible. If you do touch them wash your hands as soon as practicable afterwards.
- Always wash your hands at breaks, after any suspected contamination event and at the end of a spell of duty.
- If a specimen container leaks into a tray or box tell the laboratory reception staff and ask them to make it safe.
- If you drop and break a specimen, do not touch it or try to clear up the mess. Stay with the specimen to prevent other people touching it and send someone to the laboratory for help. If you spill the specimen onto your overall you must remove it at once and then wash your hands and put on a clean overall. Report the accident to your supervisor as soon as possible.
- Handle specimen containers gently at all times.
- Any delay in sample delivery, or untoward incident, shall be notified to laboratory reception staff and line managers.

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17 Model Rules for Transport Drivers

Some of the work carried out by Transport Drivers collecting samples may involve accidental contact with material that could be infectious. Consequently they must follow the general precautions if working in the laboratory. However, wherever they might be working they should observe the following guidelines.

- Wear your uniform properly fastened, especially when carrying specimens, even when you are not in the laboratory.
- Cover any cuts or grazes on your hands with a waterproof dressing.
- Carry all specimens in trays or boxes provided not in your hands or pockets.
- Touch specimen containers as little as possible. If you do touch them wash your hands as soon as practicable afterwards.
- Always wash your hands at breaks, after any suspected contamination event and at the end of a spell of duty.
- If a specimen container leaks into a tray or box tell the laboratory reception staff and ask them to make it safe.
- If you drop and break a specimen, do not touch it or try to clear up the mess. Stay with the specimen to prevent other people touching it and ask the immediate manager for help. If you spill the specimen onto your overall, you must remove it at once and then wash your hands and put on a clean overall. Report the accident to your supervisor as soon as possible.
- If a specimen leaks and runs do not mop it up. Drive to the laboratory for help. (Follow the advice in (11) above.) (Decontamination granules approved by the laboratory are available from the laboratory).
- If your vehicle breaks down or you have an accident, do not let anyone touch the specimens unless they have come from the hospital and know the appropriate procedure.
- Handle specimen containers gently at all times.
- Any delay in sample delivery, or untoward incident, shall be notified to laboratory reception staff and transport managers

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16 References

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- Biological agents: Managing the risks in laboratories and healthcare premises 2005
- Safe working and the prevention of infection in clinical laboratories and similar facilities 2003
- Transport of Dangerous Goods for Health Professionals 2001
- Control of Substances Hazardous to Health Regulations 1994
- Control of Substances Hazardous to Health (Amendment) Regulations 1996
- Approved methods for the Classification and Packaging of Dangerous Goods for Carriage by Road and Rail 1994
- Management of Health and Safety at Work Regulations 1992
- Personal Protective Equipment at Work Regulations 1992
- The Health and safety (Safety Signs and Signals Regulations 1996
- Chemicals (Hazard information and Packaging for Supply) Regulations 1994
- Health Services Advisory Committee Safety in Health Service Laboratories:
 - Safe working and the prevention of infection in clinical laboratories 1991
 - Safe working and the prevention of infection in clinical laboratories model rules for staff and visitors 1991
- Advisory Committee on Dangerous Pathogens: Categorisation of biological agents according to hazard and categories of containment 1995
- HIV - the causative agent of AIDS and related conditions 1990
- BioSafe Safety Services manual from roadshow 1996
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